Articles

Drugs, Poverty, Pregnancy, and Foster Care in Los Angeles, California, 1989 to 1991

MARY ANN LEWIS, DrPH, RN; BARBARA LEAKE, PhD; JEANNE GIOVANNONI, MSW, PhD; KRISTEN ROGERS, MSW, PhD; *and* GENEVIEVE MONAHAN, MSN, RN, *Los Angeles, California*

To determine the characteristics and childbearing histories of women whose infants entered foster care in Los Angeles County, we examined the cases of 1,155 drug-using women whose infants were removed from them at birth and 236 non–drug-using women whose infants were also removed at birth by court order (July 1989 through March 1991). All of the women were indigent, and less than half had graduated from high school. The drug-using women frequently had criminal records, and more than a quarter were homeless. Many comparison women had mental health problems, and some (16.7%) were teenagers under court custody.

Overall, 80% of all the children born to both groups of women were under court jurisdiction. Data obtained after study infants' births on 926 drug-using women observed for 18 months revealed that 22% had borne another infant who was placed in foster care; half of these infants had a positive drug immunoassay. Of the 185 non–drug-using women with 18-month follow-ups, 7.6% had borne another child who was in foster care. The magnitude of the repeated childbearing recorded among both groups of women in this study shows that preventive programs including family planning, mental health services, and drug prevention or rehabilitation programs have not reached this population.

(Lewis MA, Leake B, Giovannoni J, Rogers K, Monahan G: Drugs, poverty, pregnancy, and foster care in Los Angeles, California, 1989 to 1991. West J Med 1995; 163:435-440)

There is a growing awareness of the acute medical consequences of maternal drug use during pregnancy and the subsequent effects on infants with exposure to street drugs in utero.[1-13] Some cross-sectional studies have described women who abuse street drugs in relation to ethnicity,[14] physical and mental health,[15-17] use of prenatal care services,[18,19] obstetrical risks,[20,21] complications of pregnancy,[22-30] homelessness,[31,32] and risk of the acquired immunodeficiency syndrome.[33-36] A few reports have described the inadequacy of drug rehabilitation programs for pregnant drug-using women.[37-41] Others have delineated the increased costs of caring for infants with exposure to street drugs in utero,[42-45] problems with foster care placement,[46] and the subsequent effects on the child welfare system.[47-49] No published reports have yet focused on mothers of infants exposed to street drugs in utero who become dependents of the court, their childbearing histories, and the number of their children relative to other children in foster care.

In Los Angeles, the Department of Children and Family Services (DCFS) implements the directives of the Juvenile Court of Los Angeles County. The department's responsibilities include supervising children who are placed with parents and relatives or who have been removed from parents and are in protective custody with relatives or in foster care. Over the past decade, there has been a dramatic increase in DCFS's official caseload of infants with exposure to street drugs in utero. During calendar year 1981, there were 132 newborn infants with a positive drug toxicologic screen referred to DCFS directly from hospitals. During 1989, DCFS reported that 200 infants per month with prenatal exposure to drugs were referred directly from hospitals and either became dependents under the jurisdiction of the court or were placed under its supervision—that is, the infant remained in its mother's custody with DCFS staff monitoring the child's care.[50] In 1993 that number grew to 300 infants per month, nearly a 3,000% increase over the 1981 rates.[51]

In mid-1989, we began a study to determine the effects on DCFS of infants infected with the human immunodeficiency virus (HIV), including the effects on the staff who supervised the foster care services for these infants. At that time, the serologic status of the infants referred to the court was frequently unknown. In examining the infant records of DCFS for this study, it became apparent that, although the number of identified HIV-infected infants was small, the vast majority of

From the University of California, Los Angeles (UCLA), School of Nursing (Drs Lewis and Rogers and Ms Monahan), the UCLA School of Medicine and Nursing (Dr Leake), and the UCLA School of Social Welfare (Dr Giovannoni).

This study was supported by grant RO1 MH 45754-05 from the Biometric and Clinical Applications Branch, National Institute of Mental Health, Rockville, Maryland.

Reprint requests to Mary Ann Lewis, DrPH, RN, UCLA School of Nursing, 10833 Le Conte Ave, Los Angeles, CA 90024-6917.

ABBREVIATIONS USED IN TEXT

AFDC = Aid to Families with Dependent Children
DCFS = Department of Children and Family Services
HIV = human immunodeficiency virus

infants removed from their mothers at birth and referred to the Juvenile Court were born to drug-using women who had several other children who were already under the court's jurisdiction. In the absence of information describing the reproductive history of these women and the number of their children under the court's supervision, we collected data to assess the extent of the "repeated pregnancy" phenomenon and its implications.

In this report, we present data on the characteristics and childbearing histories of a sample of 1,155 drug-using women whose newborn infants exposed to street drugs in utero were referred to the Juvenile Court of Los Angeles County and a group of 236 women who were not officially labeled as drug users at the time of delivery, but whose infants were also referred to the court before hospital discharge.

Sample and Methods

Data were collected on a total of 1,391 women during a 20-month interval from July 1989 through March 1991. Each month, a list of women whose infants were referred to the DCFS at birth was reviewed by project staff. We randomly selected a sample of 60 (30%) of the 200 drug-using women on each of the monthly lists of women whose infants had a positive drug immunoassay at birth or whose maternal or neonatal behavior demonstrated drug exposure or withdrawal. A total of 1,155 women was selected over the 20-month period. During this same interval of time, we also enrolled all women (n = 236) classified as non–drug-users by inspection of their DCFS records whose infants were also removed from them by the Juvenile Court before hospital discharge. Although some women in this group may have used drugs during their pregnancies, the detailed social work evaluations conducted before and after delivery classified them as "non–drug-using women at birth."

No women or children were directly contacted or interviewed. This study was sanctioned by a court order from the Presiding Judge of the Juvenile Court of Los Angeles County and approved by the Human Subjects Protection Committee of the University of California at Los Angeles.

Data Collection

Court and DCFS records, including the results of drug toxicologic screens of infants' urine, were reviewed to abstract information related to the women's demographic and personal characteristics, including family background, education, work history, marital status and living arrangements, drug-use history, physical and mental health status, criminal history, drug treatment and rehabilitation, number of children, dates of previous children's births, and whether or not each previous child (younger than 18 years) was under court or DCFS supervision at the time of the woman's entry into the study (1989 to 1991).

Experienced retired social workers who had been in supervisory positions at the DCFS requisitioned and read each record to abstract the desired information. All records were reviewed a second time by the project field director, who found 96% agreement on the total set of items. Information for some variables was not always available in the records (reduced numbers indicated in Tables 1 and 2).

These data, most of which are nominal or ordinal, were obtained from social workers' documentation based on interviews with the women, their relatives, and a review of hospital records. No opportunities were available to assess the validity of the data presented here because, in most cases, that would have required interviewing the women. When we reviewed the hospital records of 612 of the drug-using women's infants, however, we found high correlations between DCFS and hospital information on a number of infant variables (M.A.L., B.L., "Birth Weights of Infants of Drug-Using Women at High Risk for HIV Infection," unpublished data, January 1994).

Data Analyses

Information on the women's sociodemographic, health status, and drug-using characteristics, sexual and criminal activities, and their childbearing histories was examined for the total sample and for each group separately using simple descriptive statistics. Because contrasts between the two subpopulations of women with infants under court custody or DCFS supervision were also of interest, we used χ^2 tests to assess differences in categorical measures between the two samples and t and Wilcoxon two-sample tests to detect differences in continuous measures.

Results

Table 1 describes the sociodemographic characteristics of these women, including their living arrangements, overall and by group, and Table 2 displays their history of prenatal care, mental health status, sexual history, and interaction with the justice system. Figure 1 shows the proportion of all children born to the drug-using women who were under court jurisdiction or supervision.

Sociodemographic Characteristics

As Table 1 shows, the women had an average age of 27 years, and the drug-using women were somewhat older. There was no significant difference in the number of other children they had ($P > .05$ for both t and Wilcoxon 2-sample tests); the overall average was 3.2 children.

There were differences in ethnicity among the two groups of women. Nearly two thirds of the drug-using women were African American, whereas more than a

TABLE 1.—*Sociodemographic Characteristics of Drug-Using and Non–Drug-Using Women Whose Infants Were Referred to the Juvenile Court of Los Angeles County Before Hospital Discharge*

Women's Characteristics	*Drug-Using Women (n = 1,155)*	*Non–Drug-Using Women (n = 236)*	*Total*
Mean age, yr*	28.2	24.0	27.4
Other children, mean No.	3.3	2.4	3.2
Ethnicity, %*			
African American	63.6	41.5	59.8
Latina	19.1	35.2	21.9
White	15.7	20.0	16.4
Income	(n = 905)	(n = 185)	(n = 1,090)
< $5,000 per year	97.0	94.6	96.6
Employment, %	(n = 1,022)	(n = 220)	(n = 1,242)
Full- or part-time	2.7	6.4	3.4
AFDC, %*	(n = 1,024)	(n = 217)	(n = 1,241)
Receiving	47.9	23.0	43.5
Raised by, %†	(n = 941)	(n = 186)	(n = 1,125)
Mother only	39.0	24.0	36.5
Residence, %*	(n = 969)	(n = 200)	(n = 1,169)
Born in USA	96.0	77.0	92.7
Grew up in LA County	69.4	57.0	67.2
Education	(n = 899)	(n = 174)	(n = 1,073)
High school graduate	41.4	28.2	39.2
Marital status, %*	(n = 985)	(n = 214)	(n = 1,199)
Never married	68.7	68.7	68.7
Married to infant's father	9.0	16.4	10.3
Living arrangements, %*	(n = 1,117)	(n = 230)	(n = 1,347)
Alone	14.7	7.8	13.5
Homeless	28.7	11.7	25.8
Incarcerated	4.9	1.7	4.4
Infant's father	16.6	17.8	16.8
Relatives/friends	33.7	25.2	32.2

AFDC = Aid to Families with Dependent Children

*Group differences are significant at the .001 level using 2-tailed χ^2 tests for categorical variables and 2-tailed t tests for continuous variables.
†Group difference is significant at the .01 level using the 2-tailed χ^2 test.

third of the non–drug-using women were Latina. There were concomitant differences in terms of the proportion of women who were foreign born. Most notably, almost a quarter of the non–drug-using women were foreign born.

More than a third of all the women were raised solely by their mothers. This was particularly the case for the drug-using women. About three fifths of women in both groups had not graduated from high school, and more than two thirds had never married. Only a few women in both groups were married to their infant's father.

A substantially higher proportion of drug-using women were homeless (29%), whereas (not shown in table) slightly more than a third of the non–drug-using women lived in institutions or with foster care families. A sixth of this last group were teenagers who were themselves dependents of the Juvenile Court of Los Angeles County.

Almost half of the drug-using women received support from Aid to Families with Dependent Children (AFDC) compared with about a fourth of the other women. Less than 5% of the entire sample of women were employed, either part-time or full-time, and virtually all of the women (97%) reported incomes under $5,000 per year.

Prenatal History, Mental Health, and Behaviors

As shown in Table 2, the percentage of women with a history of any prenatal care before the birth of the study infant was lower among the drug-using women (38%) than among the non–drug-using women (67%). Prenatal care was noted as received or not received; more detailed information about the number and timing of prenatal care visits was generally not recorded.

Almost a third of the non–drug-using women had mental health problems, such as schizophrenia, manic-depressive disorders, and affective disorders, compared with a much lower rate among the drug-using women (12%).

Mental retardation was recorded for 11% of the non–drug-using women and only 1.6% of the drug-using

TABLE 2.—*Prenatal Care History, Mental Health Status, and Behaviors of Drug-Using and Non–Drug-Using Women Whose Infants Were Referred to the Juvenile Court of Los Angeles County at Birth Before Hospital Discharge*

Women's Characterisitcs	Drug-Using Women (n = 1,155) (No.)* %	Non–Drug-Using Women (n = 236) (No.)* %	Total (n = 1,391) (No.)* %
History of prenatal care†	(901) 38.0	(129) 66.7	(1,030) 41.6
Mental health problem†	12.1	30.9	15.3
Mental retardation	1.6	11.0	3.2
Interaction with justice system			
Jailed at least once†	30.1	6.4	26.1
Multiple arrests†	(991) 37.4	(220) 10.0	(1,211) 32.5
Sexual history			
Multiple partners†	(1,004) 76.9	(190) 42.6	(1,194) 71.4
Prostitution	(1,136) 19.0	1.7	(1,149) 16.1

*Numbers are presented for variables with missing data.
†Group difference is significant at the .001 level using 2-tailed χ^2 tests.

women. Reasons for the court's removal of infants from the non–drug-using women (not shown in Table 2) included either recent or past evidence of either or both physical and sexual abuse of the infant's siblings (23%) and severe or general neglect (9%).

About a third of the drug-using women had been in jail at least once compared with less than a tenth of the other women. The drug-using women were also more likely to have a history of multiple arrests. As shown in Table 2, more than three quarters of the drug-using and slightly less than half of the non–drug-using women had a history of having multiple sex partners. Only a few non–drug-using women had been arrested for prostitution compared with a fifth of the drug-using women.

Two thirds of the drug-using women had never been enrolled in a drug rehabilitation program; nearly 5% of the women had been enrolled, but had dropped out (not shown). The drugs most commonly used by these women (not shown) were stimulants (cocaine, 87%; and methamphetamines, 7%), partial hallucinogens (marijuana, 28%; and phencyclidine piperdine [PCP], 9%), and heroin and other opiates (heroin, 12%; codeine, 3%; methadone, 3%; and other opiates, 4%). Most of their infants (89%) listed positive for one or more of these drugs; 94% of their infants either listed positive for drugs or showed signs of drug withdrawal at birth.

Childbearing Histories

Figure 1 compares the proportion of children of the drug-using women who were under court jurisdiction or DCFS supervision by family size. Overall, 3,124 (80%) of all of the 3,881 children born to these women were under the jurisdiction or supervision of the court. Although not shown in the figure, 80% of the children of the non–drug-using women were also under the jurisdiction or supervision of the court.

Additional Pregnancies

The DCFS records for 926 drug-using women who were observed for 18 months after the birth of the study infant revealed that 207 women (22%) had borne another infant in that period. Of these 207 infants, more than half (n = 111) had a positive drug immunoassay screen at birth and 123 (59%) were under the court's jurisdiction.

Of the 185 non–drug-using women with 18 months' follow-up, 14 (8%) had borne another child. None of these babies tested positive for drugs at birth. Nevertheless, 7 infants (50%) were placed under the court's jurisdiction.

Discussion

The drug-using women in this study were more likely than other women in the DCFS sample to be African American, raised by their mothers only, and homeless. They were also more likely to have been in jail, to have criminal histories and multiple sexual partners, and to have engaged in prostitution. The non–drug-using women were younger, less likely to be high school graduates, and less likely to be on AFDC, reflecting either their high rate of mental health problems or the fact that they were teenagers, nearly half of whom were also dependents under court jurisdiction. The non–drug-using women were also more likely to be mentally retarded and to have received some prenatal care. The last finding probably results from the supervision these women received, either from institutions or their foster care families.

More than half of the women in this sample were African American, and a fifth were Latina. How does the ethnic distribution of all women of childbearing age living in poverty in Los Angeles compare with these data? According to the 1990 census for Los Angeles County, among women aged 17 to 40 years living below the poverty level, 54.8% were Latina, 20.7% were white, and 14.2% were African American.[52] Thus, impoverished African-American women were significantly overrepresented in the DCFS samples, 59.8% versus 14.2%, whereas Latinas were significantly underrepresented, 21.9% versus 54.8%; whites were approximately equally represented.

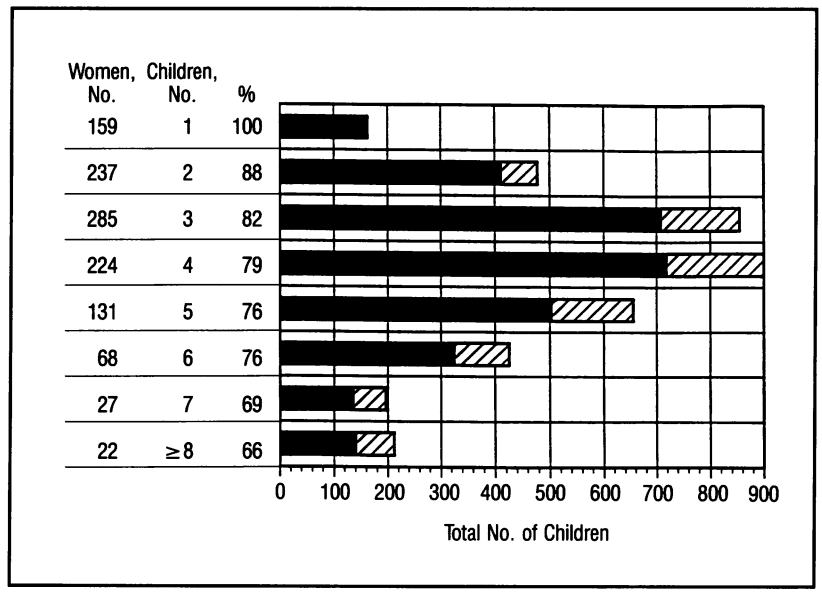

Figure 1.—The graph shows the number of children of drug-using women and the percentage of their children under the jurisdiction or supervision (or both) of the Juvenile Court of Los Angeles County, California. ■ = children of drug-using women under court jurisdiction or supervision or both; ▨ = children of drug-using women not under court jurisdiction or supervision.

A limitation of this study is that the predominance of African Americans in the sample of drug-using women may, in part, reflect ascertainment bias as reported by others[53,54] and by Los Angeles County hospital personnel because no monitoring process exists to ensure compliance with the law to assess parental competence to provide suitable care for infants suspected of prenatal drug exposure. A second limitation is that hospital personnel's knowledge of the placement of the women's other children under court custody may have predisposed them to screen their newborns for toxic substances. This form of ascertainment bias may, in fact, artificially elevate the study's main finding of a high percentage of the women's other children living in foster care. In other words, if a woman was not detected in previous pregnancies and her children not placed in foster care, she would be less likely to be detected during a subsequent pregnancy.

The cohort of drug-using women in this study, identified through the reporting of an index infant to DCFS and the court during the time interval specified, is a unique one. Although it does not represent all, or even some, well-defined proportion of the drug-using women in Los Angeles who bore an infant exposed to street drugs in utero during the time of this study, it does represent the new type of family requiring newborn foster care placement. In New York City, maternal cocaine use is the leading reason for infants being removed from their mothers at birth.[46] Some data suggest that as many as 80% of infants with prenatal drug exposure will be placed in foster care during their first year of life.[47] The lack of sufficient resources for the child welfare system to provide intensive services for the growing number of families who, before the cocaine epidemic, were maintained with less attention has been noted as a major crisis.[47]

About 400,000 children in the nation live in some type of foster care,[55] despite the fact that the demand for high-quality foster care outweighs the number of family placements available.[47,55,56] Not only is foster care itself expensive (in Los Angeles, the 1993-1994 budget for DCFS was just under $700 million), but foster care children also have higher rates of mental health, behavioral, and school problems[57-59] and physical health problems.[60] Clearly, the childbearing histories and major characteristics of drug-using and other poor women whose children become dependents of the Juvenile Court deserve serious investigation and action. The data from this study confirm those of others that show that the foster care population is increasingly one of drug-using and adolescent minority women and their children.[61] The lack of preventive, health, and social services and the subsequent consequences for mothers, their children, and the child health and welfare systems in the nation's second largest city cannot be ignored if, indeed, Los Angeles's reputation for forecasting to the nation holds true.

Acknowledgment

The cooperation of the administration and staff of the Department of Children and Family Services and the presiding judges of the Juvenile Court of Los Angeles County made it possible for us to conduct this study. Douglas Anglin, PhD, Director of the UCLA Drug Abuse Research Center, provided helpful comments regarding the manuscript, and Kathie Marti, MPH, RN, helped to collect and manage the data.

REFERENCES

1. Culver KW, Ammann AJ, Partridge JC, Wong DF, Wara DW, Cowan MJ: Lymphocyte abnormalities in infants born to drug-abusing mothers. J Pediatr 1987; 111:230-235

2. Teske MP, Trese MT: Retinopathy of prematurity-like fundus and persistent hyperplastic primary vitreous associated with maternal cocaine use. Am J Ophthalmol 1987; 103:719-720

3. Lewis PT: Animal tests for teratogenicity and their relevance to clinical practice, *In* Hawkins DF (Ed): Drugs and Pregnancy: Human Teratogenesis and Related Problems, 2nd edition. New York, NY, Churchill Livingstone, 1987, pp 22-26

4. Chasnoff IJ, Burns KA, Burns WJ: Cocaine use in pregnancy: Perinatal morbidity and mortality. Neurotoxicol Teratol 1987; 9:291-293

5. Dixon SD, Coen RW, Crutchfield S: Visual dysfunction in cocaine-exposed infants (Abstr). Pediatr Res 1987; 21:359

6. Oro AS, Dixon SD: Perinatal cocaine and methamphetamine exposure: Maternal and neonatal correlates. Pediatrics 1987; 111:571-578

7. Bingol N, Fuchs M, Diaz V, Stone RK, Gromisch DS: Teratogenicity of cocaine in humans. J Pediatr 1987; 110:93-96 [erratum published in J Pediatr 1987; 110:350]

8. Chouteau M, Namerow PB, Leppert P: The effect of cocaine abuse on birth weight and gestational age. Obstet Gynecol 1988; 72:351-354

9. Hume RF, O'Donnell KJ, Stranger CL, Killan AP, Gingras JL: In utero cocaine exposure: Observations of fetal behavioral state may predict neonatal outcome. Am J Obstet Gynecol 1989; 161:685-690

10. Spear LP, Kirstein CL, Frambes NA: Cocaine effects on the developing central nervous system: Behavioral, psychopharmacological, and neurochemical studies. Ann N Y Acad Sci 1989; 562:290-307

11. Zuckerman BS, Frank DA, Hingson R, et al: Effects of maternal marijuana and cocaine use on fetal growth. N Engl J Med 1989; 320:762-768

12. Kaye K, Elkind L, Goldberg D, Tytun A: Birth outcomes for infants of drug abusing mothers. N Y State J Med 1989; 89:256-261

13. Chasnoff IJ, Hunt CE, Kletter R, Kaplan R, Kaplan D: Prenatal cocaine exposure is associated with respiratory pattern abnormalities. Am J Dis Child 1989; 143:583-587

14. Zambrana RE, Hernandez M, Dunkel-Schetter C, Scrimshaw SCM: Ethnic differences in the substance use patterns of low-income pregnant women. Fam Community Health 1991; 13:1-11

15. Hughes TL: Evaluating research on chemical dependency among women: A women's health perspective. Fam Community Health 1990; 13:35-46

16. Regier DA, Farmer ME, Rae DS, et al: Comorbidity of mental disorders with alcohol and other drug use—Results from the Epidemiologic Catchment Area (ECA) Study. JAMA 1990; 264:2511-2518

17. Bry H: Substance abuse in women: Etiology and prevention. Issues Mental Health Nurs 1983; 5:253-272

18. Melnikow J, Alemagno SA, Rottman C, Zyzanski SJ: Characteristics of inner-city women giving birth with little or no prenatal care: A case-control study. J Fam Pract 1991; 32:283-288

19. Chang G, Carroll KM, Behr HM, Kosten TR: Improving treatment outcome in pregnant opiate-dependent women. J Subst Abuse Treat 1992; 9:327-330

20. Burkett G, Yasin S, Palow D: Perinatal implications of cocaine exposure. J Reprod Med 1990; 35:35-42

21. Finnegan L: Drug Dependence in Pregnancy: Clinical Management of Mother and Child. Detroit, Mich, NIDA Res Monogr, 1979 [USDHEW NIDA grant 5 H81 DA 01496-03]

22. Green M, Silverman I, Suffet F, Taleporos E, Turkel WV: Outcomes of pregnancy for addicts receiving comprehensive care. Am J Drug Alcohol Abuse 1979; 6:413-429

23. Frank DA, Zuckerman BS, Amaro H, et al: Cocaine use during pregnancy: Prevalence and correlates. Pediatrics 1988; 82:888-895

24. Keith LG, MacGregor SN, Friedell S, Rosner M, Chasnoff IJ, Sciarra JJ: Substance abuse in pregnant women: Recent experience at the Perinatal Center for Chemical Dependence of Northwestern Memorial Hospital. Obstet Gynecol 1989; 73(pt 1):715-720

25. MacGregor SN, Keith LG, Bachicha JA, Chasnoff IJ: Cocaine abuse during pregnancy: Correlation between prenatal care and perinatal outcome. Obstet Gynecol 1989; 74:882-885

26. Dattel B: Substance abuse in pregnancy. Semin Perinatol 1990; 14:179-187

27. Little BB, Snell LM, Gilstrap LD III, Johnston WL: Patterns of multiple substance abuse during pregnancy: Implications for mother and fetus. South Med J 1990; 83:507-509

28. Graham K, Koren G: Characteristics of pregnant women exposed to cocaine in Toronto between 1985 and 1990. Can Med Assoc J 1991; 144:563-568

29. Berenson AB, Stiglich NJ, Wilkinson GS, Anderson GD: Drug abuse and other risk factors for physical abuse in pregnancy among white non-Hispanic, black, and Hispanic women. Am J Obstet Gynecol 1991; 164:1491-1499

30. Evans AT, Gillogley K: Drug use in pregnancy: Obstetric perspectives. Clin Perinatol 1991; 18:23-32

31. Weinreb LF, Bassuk EL: Substance abuse: A growing problem among homeless families. Fam Community Health 1990; 13:55-64

32. Martin MA: The homeless mentally ill and community-based care: Changing mindset. Community Ment Health J 1990; 26:435-447

33. Scott GB, Fischl MA, Klimas N, et al: Mothers of infants with the acquired immunodeficiency syndrome—Evidence for both symptomatic and asymptomatic carriers. JAMA 1985; 253:363-366

34. Guinan ME, Hardy A: Epidemiology of AIDS in women in the United States 1981 through 1986. JAMA 1987; 257:2039-2042

35. Koser P, Grigosiu A, Kapila R: Women With AIDS: A Continuing Study. IV International Conference on AIDS, Stockholm, 1988, abstract 4065

36. Hoff R, Berardi VP, Weiflen BJ, Mahoney-Trout BS, Mitchell ML, Grady GF: Seroprevalence of human immunodeficiency virus among childbearing women. N Engl J Med 1988; 318:525-530

37. Gittler J, McPherson M: Prenatal substance abuse, an overview of the problem. Child Today 1990; 19:3-7

38. Horgan C, Rosenbach M, Ostby E, Butrica B: Targeting Special Populations With Drug Abuse Problems: Pregnant Women. NIDA Drug Abuse Ser [1] 1991; 123-144

39. Wellisch J, Anglin MD, Prendergast ML: Extent and Consequences of Drug Dependence in Women—White Paper Series for Drug Abuse Information and Monitoring Project. Sacramento, Calif, Dept of Alcohol and Drug Programs, 1991

40. Kumpfer KL: Treatment programs for drug-abusing women. The Future of Children: Drug Exposed Infants 1991; 1:50-60 [Center for the Future of Children, the David and Lucile Packard Foundation]

41. Slutsker L, Smith R, Higginson G, Fleming D: Recognizing illicit drug use by pregnant women: Reports from Oregon birth attendants. Am J Public Health 1993; 83:61-64

42. Chiu TT, Vaughn AF, Carzoli RP: Hospital costs for cocaine-exposed infants. J Fla Med Assoc 1990; 77:897-900

43. Phibbs CS, Bateman DA, Schwartz RM: The neonatal costs of maternal cocaine use. JAMA 1991; 266:1521-1526

44. Calhoun DC, Watson PT: The cost of maternal cocaine abuse—I. Perinatal cost. Obstet Gynecol 1991; 78:731-734

45. Phibbs CS: The economic implications of substance exposure—The Future of Children: Drug-Exposed Infants. JAMA 1991; 266:113-120

46. Neuspiel DR, Zingman TM, Templeton BA, DiStabile P, Drucker E: Custody of cocaine-exposed newborns: Determinants of discharge decisions. Am J Public Health 1993; 83:1726-1729

47. McCullough CB: The child welfare response. The Future of Children: Drug-Exposed Infants 1991; 1:61-71 [Center for the Future of Children, The David and Lucile Packard Foundation]

48. Besharov DJ: Crack children in foster care, re-examining the balance between children's rights and parent's rights. Child Today 1990; 19:21-36

49. Boland P: Perspective of a juvenile court judge. The Future of Children: Drug-Exposed Infants 1991; 1:100-104 [Center for the Future of Children, the David and Lucile Packard Foundation]

50. Los Angeles County Dept of Children's Services, Statistical Report, December 1991

51. Los Angeles County Dept of Children's Services, 1992-1993 Annual Report, 1993

52. 1990 United States Census

53. Chasnoff IJ, Landress HJ, Barrett ME: The prevalence of illicit-drug or alcohol use during pregnancy and discrepancies in mandatory reporting in Pinellas County, Florida. N Engl J Med 1992; 22:102-106, 199

54. Racine AR, Joyce T, Anderson R: The association between prenatal care and birth weight among women exposed to cocaine in New York City. JAMA 1993; 270:1581-1586

55. Center for the Study of Social Policy: The Crisis in Foster Care: New Directions for the 1990s. Washington, DC, The Family Impact Seminar, 1990

56. Jost K: Foster Care Crisis. CQ [Congressional Quarterly] Researcher 1991; 1:705-729 [formerly Editorial Research Reports]

57. Halfon N, Berkowitz G, Klee L: Mental health service utilization by children in foster care in California. Pediatrics 1992; 89:1238-1244

58. Klee L, Halfon N: Mental health care for foster children in California. Child Abuse Neglect 1987; 2:63-74

59. Dubowitz H, Zuravin S, Starr RH, Feigelman S, Harrington D: Behavior problems of children in kinship care. J Behav Devel Pediatr 1993; 14:386-393

60. Dubowitz H, Feigelman S, Zuravin S, Tepper V, Davidson N, Lichenstein R: The physical health of children in kinship care. Am J Dis Child 1992; 146:603-610

61. Stehno SM: The elusive continuum of child welfare services: Implications for minority children and youths. Child Welfare 1990; 69:551-562